

Appl. No. 10/603,279
Docket No. 9286L
Amdt. dated 4/16/07
Reply to Office Action mailed on 1/17/07
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for removing asparagine or converting asparagine to a different substance by hydrolyzing the amide group of the asparagine to form aspartic acid in a corn-based food material comprising adding ~~the asparagine-reducing~~ asparaginase enzyme to the food material before heating.
2. (Canceled)
3. (Previously Presented) The method of claim 1, wherein at least about 10% of the asparagine is converted to a different substance or removed.
4. (Canceled)
5. (Currently Amended) A method for removing asparagine or converting asparagine to a different substance by hydrolyzing the amide group of the asparagine to form aspartic acid in a corn-based food material, comprising:
 - (1) adding ~~the asparagine-reducing~~ asparaginase enzyme to the corn-based food material, wherein said corn based food material comprises asparagine;
 - (2) optionally mixing the enzyme with the corn based food material;
 - (3) allowing a sufficient time for the enzyme to react with the asparagine; and
 - (4) optionally deactivating or optionally removing the enzyme.
- 6 - 9. (Canceled)
10. (Currently Amended) A method for reducing the level of acrylamide formed in {{a}} heated corn-based food products, comprising:

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- (1) adding the ~~asparagine-reducing~~ asparaginase enzyme to a corn-based food material, wherein said corn-based food material comprises asparagine;
- (2) optionally mixing the enzyme with the corn-based food material;
- (3) allowing a sufficient time for the enzyme to react with the asparagine whereby at least a portion of the asparagine is removed or is converted to a different substance by hydrolyzing the amide group of the asparagine to form aspartic acid;
- (4) optionally deactivating or optionally removing the enzyme; and
- (5) heating the corn-based food material to form the heated corn-based food product.

11. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 10% of the asparagine is converted to a different substance or is removed.

12. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 30% of the asparagine is converted to a different substance or is removed.

13. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 50% of the asparagine is converted to a different substance or is removed.

14. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 70% of the asparagine is converted to a different substance or is removed.

15. (Previously Presented) A corn-based food material prepared according to the method of claim 14, wherein at least about 90% of the asparagine is converted to a different substance or is removed.

16 – 44. (Canceled)